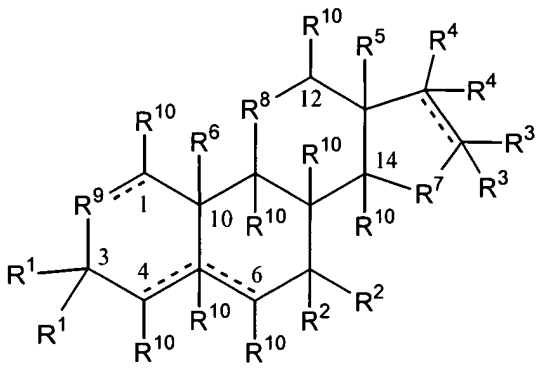
AMENDMENTS TO THE CLAIMS

This listing of claims replaces any prior version of the claims in the application.

Claim 1 (original): A method to treat a blood cell deficiency in a subject in need thereof comprising administering to the subject, or delivering to the subject's tissues, an effective amount of a compound of formula 1



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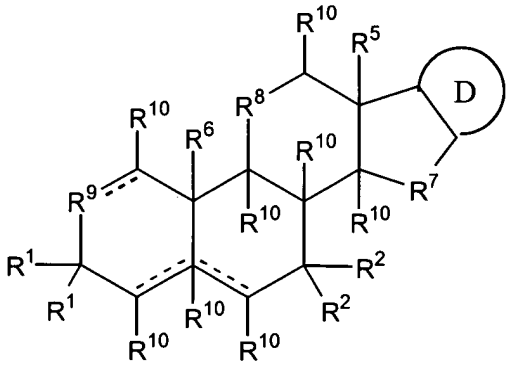
wherein, each R^1, R^2, R^3, R^4, R^5, R^6 and R^{10} independently are -H, OH, -OR^{PR}, -SR^{PR}, -$N(R^{PR})_2$, -O-Si-$(R^{13})_3$, -CHO, -CHS, -CH=NH, -CN, -SCN, -NO_2, -OSO_3H, -OPO_3H, an ester, a thioester, a thionoester, a phosphoester, a phosphothioester, a phosphonoester, a phosphiniester, a sulfite ester, a sulfate ester, an amide, an amino acid, a peptide, an ether, a thioether, an acyl group, a thioacyl group, a carbonate, a carbamate, a halogen, an optionally substituted alkyl group, an optionally substituted alkenyl group, an optionally substituted alkynyl group, an optionally substituted aryl moiety, an optionally substituted heteroaryl moiety, an optionally substituted heterocycle, an optionally substituted monosaccharide, an optionally substituted oligosaccharide, a nucleoside, a nucleotide, an oligonucleotide, a polymer, or,

one or more of both R^1, R^2, R^3 or R^4 together comprise an independently selected spiro ring, or

one more of R^1, R^2, R^3, R^4, R^5, R^6 and R^{10} are =O, =S, =N-OH, $=CH_2$, or a spiro ring and the hydrogen atom or the second variable group that is bonded to the same carbon atom is absent, or,

one or more of two adjacent R^1-R^6 and R^{10} comprise an independently selected an acetal, a thioacetal, ketal or thioketal, or

all R^3 and R^4 together comprise a structure of formula 2



2;

R^7 is $-C(R^{10})_2-$, $-C(R^{10})_2-C(R^{10})_2-$, $-C(R^{10})_2-C(R^{10})_2-C(R^{10})_2-$, $-C(R^{10})_2-O-C(R^{10})_2-$, $-C(R^{10})_2-S-C(R^{10})_2-$, $-C(R^{10})_2-NR^{PR}-C(R^{10})_2-$, -O-, $-O-C(R^{10})_2-$, -S-, $-S-C(R^{10})_2-$, $-NR^{PR}-$ or $-NR^{PR}-C(R^{10})_2-$;

R^8 and R^9 independently are $-C(R^{10})_2-$, $-C(R^{10})_2-C(R^{10})_2-$, -O-, $-O-C(R^{10})_2-$, -S-, $-S-C(R^{10})_2-$, $-NR^{PR}-$ or $-NR^{PR}-C(R^{10})_2-$, or one or both of R^8 or R^9 independently are absent, leaving a 5-membered ring;

R^{13} independently is C_{1-6} alkyl;

R^{PR} independently is -H or a protecting group;

D is a heterocycle or a 4-, 5-, 6- or 7-membered ring that comprises saturated carbon atoms, wherein 1, 2 or 3 ring carbon atoms of the 4-, 5-, 6- or 7-membered ring are optionally independently substituted with -O-, -S- or $-NR^{PR}-$ or where 1, 2 or 3 hydrogen atoms of the heterocycle or where 1, 2 or 3 hydrogen atoms of the 4-, 5-, 6- or 7-membered ring are substituted with –OH, $-OR^{PR}$, $-SR^{PR}$, $-N(R^{PR})_2$, $-O-Si-(R^{13})_3$, -CHO, -CHS, -CH=NH, -CN, -SCN, $-NO_2$, $-OSO_3H$, $-OPO_3H$, an ester, a thioester, a thionoester, a phosphoester, a phosphothioester, a phosphiniester, a sulfite ester, a sulfate ester, an amide, an amino acid, a peptide, an ether, a thioether, an acyl group, a thioacyl group, a carbonate, a

carbamate, a halogen, an optionally substituted alkyl group, an optionally substituted alkenyl group, an optionally substituted alkynyl group, an optionally substituted aryl moiety, an optionally substituted heteroaryl moiety, an optionally substituted heterocycle, an optionally substituted monosaccharide, an optionally substituted oligosaccharide, a nucleoside, a nucleotide, an oligonucleotide or a polymer, or,

one more of the ring carbons in D are substituted with =O, =S, =N-OH, $=CH_2$, or a spiro ring, or

one or more of two adjacent ring carbons in D comprise an independently selected acetal, thioacetal, ketal or thioketal, or

D comprises two 5- or 6-membered rings, wherein the rings are fused or are linked by 1 or 2 bonds, or a metabolic precursor or a biologically active metabolite thereof, provided that the compound is not 5-androstene-3β-ol-17-one, 5-androstene-3β,17β-diol, 5-androstene-3β,7β,17β-triol or a derivative of any of these three compounds that can convert to these compounds by hydrolysis.

Claim 2 (original): The method of claim 1 wherein one or two R^{10} at the 1, 4, 6, 8, 9, 12 and 14 positions is not -H.

Claim 3 (original):The method of claim 2 wherein the one or two R^{10} at the 1, 4, 6, 8, 9, 12 and 14 positions are independently selected from -F, -Cl, -Br, -I, -OH, =O, $-CH_3$, $-C_2H_5$, an ether optionally selected from $-OCH_3$ and $-OC_2H_5$, and an ester optionally selected from $-O-C(O)-CH_3$ and $-O-C(O)-C_2H_5$.

Claim 4 (original): The method of claim 3 wherein the one or two R^{10} at the 1, 4, 6, 8, 9, 12 and 14 positions are independently selected from -F and -OH.

Claim 5 (original): The method of claim 4 wherein R^1, R^2, R^3 and R^4 are independently selected from -H, -OH, =O, an ester and an ether.

Claim 6 (original): The method of claim 1 wherein the subject has thrombocytopenia or neutropenia.

Claim 7 (original): The method of claim 1 wherein the subject's circulating platelets, red cells, mature myelomonocytic cells, or their precursor cells, in circulation or in tissue is detectably increased.

Claim 8 (original): The method of claim 7 wherein the subject's circulating platelets are detectably increased.

Claim 9 (original): The method of claim 7 wherein the subject's circulating myelomonocytic cells are detectably increased.

Claim 10 (original): The method of claim 7 wherein the circulating myelomonocytic cells are neutrophils.

Claim 11 (original): The method of claim 7 wherein the myelomonocytic cells are basophils, neutrophils or eosinophils.

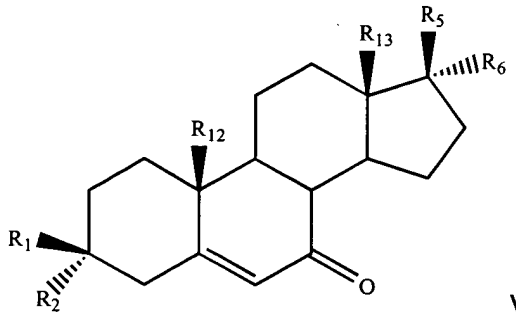
Claim 12 (original): The method of claim 7 wherein the subject's circulating red cells are detectably increased.

Claim 13 (original): The method of claim 7 wherein the subject is has renal failure.

Claim 14 (original): The method of claim 7 further comprising the steps of obtaining blood from the subject before administration of the formula 1 compound and measuring the subject's white or red cell counts and optionally, on one, two, three or more occasions, measuring the subject's circulating white cell or red cell counts after administration of the formula 1 compound.

Claim 15 (original): The method of claim 14 wherein the subject's white or red cell counts are measured on one, two, three or more occasions within about 12 weeks after an initial administration of the formula 1 compound.

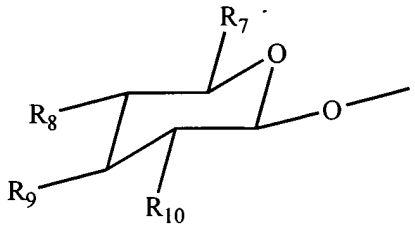
Claim 16 (original): A compound of formula V



V

or a pharmaceutically acceptable salt, ester, amide, or prodrug thereof, wherein

(a) R_1 and R_2 are each independently selected from the group consisting of a hydrogen atom and a glucuronide group having the formula



wherein (i) R_7 is an alkyl ester wherein the alkyl moiety is optionally substituted, and (ii) R_8, R_9 and R_{10} are each $-OR_{14}$, wherein R_{14} is a hydrogen atom or a protected hydroxy, optionally substituted alkyl, cycloalkyl; and (iii) at least one of R_1 or R_2 is not hydrogen;

(b) R_5 and R_6 are each independently selected from the group consisting of a hydrogen atom, optionally substituted alkyl, hydroxy, and a protected hydroxy; or R_5 and R_6 taken together are a ketone group (=O); and

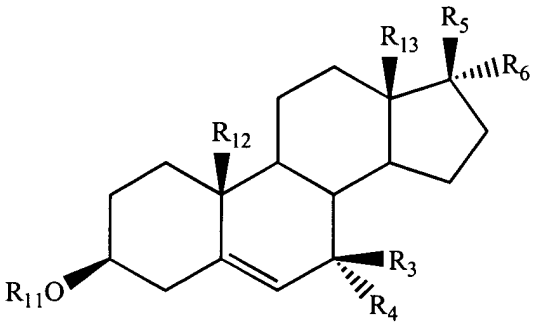
(c) R_{12} and R_{13} are each independently selected from the group consisting of a hydrogen atom, optionally substituted alkyl, hydroxy, and a protected hydroxy.

Claim 17 (original): The compound of claim 16, wherein said protected hydroxy is an ester or wherein one of R_1 and R_2 is -H and the other one of R_1 and R_2 is the glucuronide group.

Claim 18 (original): The compound of claim 16, wherein R_{12} and R_{13} are methyl.

Claim 19 (original): A composition comprising a compound of claim 16 and one or more excipients.

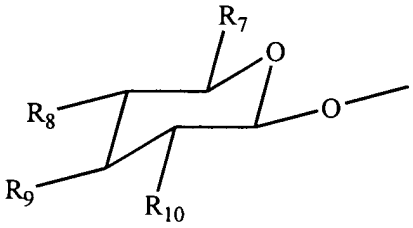
Claim 20 (original): A compound of formula VII



VII

or a pharmaceutically acceptable salt, ester, amide, or prodrug thereof, wherein

(a) R_3 and R_4 are each independently selected from the group consisting of a hydrogen atom and a glucuronide group having the formula



wherein (i) R_7 is an alkyl ester wherein the alkyl moiety is optionally substituted, and (ii) R_8, R_9 and R_{10} are each $-OR_{14}$, wherein R_{14} is a hydrogen atom, optionally substituted alkyl, cycloalkyl, or a protected hydroxy; and (iii) at least one of R_3 and R_4 is not hydrogen;

(b) R_5 and R_6 are each independently selected from the group consisting of a hydrogen atom, optionally substituted alkyl, hydroxy, and a protected hydroxy; or R_5 and R_6 taken together are =O;

(c) R_{11} is a hydrogen atom or a protected hydroxy; and

(d) R_{12} and R_{13} are each independently selected from the group consisting of a hydrogen atom, optionally substituted alkyl, hydroxy, and a protected hydroxy.

Claim 21 (original): The compound of Claim 20, wherein one of R_3 and R_4 is a hydrogen atom and the other one of R_1 and R_2 is the glucuronide.

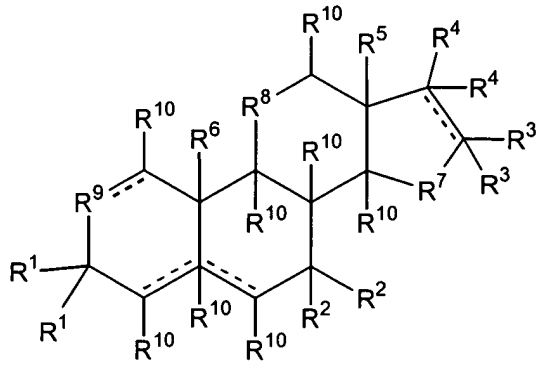
Claim 22 (original): The compound of Claim 20, wherein one of R_5 and R_6 is a hydrogen atom and the other one of R_5 and R_6 is acetoxy.

Claim 23 (original): The compound of Claim 20, wherein R_{12} and R_{13} are methyl.

Claim 24 (original): The compound of claim 20 selected from the group consisting of methyl-2,3,4-tri-O-acetyl-1-O-(3β,17β-diacetoxyandrost-5-ene-7β-yl)-β-D-gluco-pyranosiduronate, methyl 1-O-(3β,17β-diacetoxyandrost-5-ene-7β-yl)-β-D-gluco-pyranosiduronate, and methyl-2,3,4-tri-O-acetyl-1-O-(3β-acetoxy-17-oxoandrost-5-ene-7α-yl)-β-D-glucopyranosiduronate, or the pharmaceutically acceptable salt, ester, ether, amide, or prodrug thereof.

Claims 25-32 (canceled)

Claim 33 (original): A method to treat a symptom or condition associated with one or more delayed adverse or unwanted effects of radiation exposure in a subject in need thereof comprising administering to the subject, or delivering to the subject's tissues, an effective amount of a compound of formula 1



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wherein, each R^1, R^2, R^3, R^4, R^5, R^6 and R^{10} independently are -H, -OH, -OR^{PR}, -SR^{PR}, -$N(R^{PR})_2$, -O-Si-$(R^{13})_3$, -CHO, -CHS, -CH=NH, -CN, -SCN, -NO_2, -OSO_3H, -OPO_3H, an ester, a thioester, a thionoester, a phosphoester, a phosphothioester, a phosphonoester, a phosphiniester, a sulfite ester, a sulfate ester, an amide, an amino acid, a peptide, an ether, a thioether, an acyl group, a thioacyl group, a carbonate, a carbamate, a halogen, an optionally substituted alkyl group, an optionally substituted alkenyl group, an optionally substituted alkynyl group, an optionally substituted aryl moiety, an optionally substituted heteroaryl moiety, an optionally substituted heterocycle, an optionally substituted

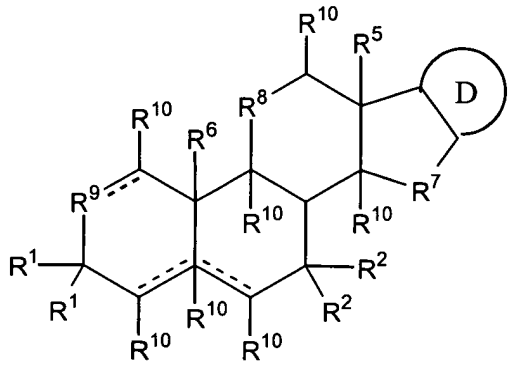
monosaccharide, an optionally substituted oligosaccharide, a nucleoside, a nucleotide, an oligonucleotide, a polymer, or,

one or more of both R^1, R^2, R^3 or R^4 together comprise an independently selected spiro ring, or

one more of R^1, R^2, R^3, R^4, R^5, R^6 and R^{10} independently are =O, =S, =N-OH, $=CH_2$, or a spiro ring, and the hydrogen atom or the second variable group that is bonded to the same carbon atom is absent, or,

one or more of two adjacent R^1-R^6 and R^{10} comprise an independently selected acetal, thioacetal, ketal or thioketal moiety;

all R^3 and R^4 together comprise a structure of formula 2



2;

R^7 is $-C(R^{10})_2-$, $-C(R^{10})_2-C(R^{10})_2-$, $-C(R^{10})_2-C(R^{10})_2-C(R^{10})_2-$, $-C(R^{10})_2-O-C(R^{10})_2-$, $-C(R^{10})_2-S-C(R^{10})_2-$, $-C(R^{10})_2-NR^{PR}-C(R^{10})_2-$, -O-, $-O-C(R^{10})_2-$, -S-, $-S-C(R^{10})_2-$, $-NR^{PR}-$ or $-NR^{PR}-C(R^{10})_2-$;

R^8 and R^9 independently are $-C(R^{10})_2-$, $-C(R^{10})_2-C(R^{10})_2-$, -O-, $-O-C(R^{10})_2-$, -S-, $-S-C(R^{10})_2-$, $-NR^{PR}-$ or $-NR^{PR}-C(R^{10})_2-$, or one or both of R^8 or R^9 independently are absent, leaving a 5-membered ring;

R^{13} independently is C_{1-6} alkyl;

R^{PR} independently is -H or a protecting group;

D is a heterocycle or a 4-, 5-, 6- or 7-membered ring that comprises saturated carbon atoms, wherein 1, 2 or 3 ring carbon atoms of the 4-, 5-, 6- or 7-membered ring are optionally independently substituted with -O-, -S- or $-NR^{PR}-$ or where 1, 2 or 3 hydrogen atoms of the heterocycle or where 1, 2 or 3 hydrogen atoms of the 4-, 5-, 6- or 7-membered ring are independently substituted with -

OH, $-OR^{PR}$, $-SR^{PR}$, $-N(R^{PR})_2$, $-O-Si-(R^{13})_3$, -CHO, -CHS, -CH=NH, -CN, -SCN, $-NO_2$, $-OSO_3H$, $-OPO_3H$, an ester, a thioester, a thionoester, a phosphoester, a phosphothioester, a phosphiniester, a sulfite ester, a sulfate ester, an amide, an amino acid, a peptide, an ether, a thioether, an acyl group, a thioacyl group, a carbonate, a carbamate, a halogen, an optionally substituted alkyl group, an optionally substituted alkenyl group, an optionally substituted alkynyl group, an optionally substituted aryl moiety, an optionally substituted heteroaryl moiety, an optionally substituted heterocycle, an optionally substituted monosaccharide, an optionally substituted oligosaccharide, a nucleoside, a nucleotide, an oligonucleotide or a polymer, or,

one more of the ring carbons are substituted with =O, =S, =N-OH, $=CH_2$, or a spiro ring, or

two adjacent D ring carbons comprise an independently selected acetal, thioacetal, ketal or thioketal moiety, or

D comprises two 5- or 6-membered rings, wherein the rings are fused or are linked by 1 or 2 bonds, and the dotted lines are optional double bonds, provided that there are not double bonds simultaneously at the 4-5 and the 5-6 positions.

wherein the formula 1 compound is administered or delivered to the subject's tissues beginning at least 1 day after the subject has been exposed to a dose of radiation that will cause or could potentially cause the one or more delayed adverse or unwanted effects of the radiation exposure or

wherein the formula 1 compound is administered or delivered to the subject's tissues beginning at least 1 day after the subject has been exposed to at least one subdose of a planned course of radiation exposures that will cause or could potentially cause the one or more delayed adverse effects or unwanted effects of the radiation exposure.

Claim 34 (original): The method of claim 33 wherein the subject has received a total radiation dose of at least about 0.5 Gy to about 300 Gy, at least about Gy 1 to about 200 Gy or at least about Gy 2 to about 150 Gy, wherein the

subject received the radiation dose in a single dose or in two or more divided doses.

Claim 35 (original): The method of claim 33 wherein the symptom or condition associated with one or more delayed adverse effect of radiation is one or more of encephalopathy, myelopathy, nausea, vomiting, diarrhea, acute inflammation, chronic inflammation, edema, pain, headache, depression, fever, malaise, weakness, hair loss, skin atrophy, skin ulceration, skin lesion, keratosis, telangiectasia, infection, hypoplasia, atrophy, fibrosis, pneumonitis, bone marrow hypoplasia, hemorrhage or cytopenia.

Claim 36 (original): The method of claim 35 wherein the infection is a bacterial, viral, fungal, parasite or yeast infection, or wherein the fibrosis is lung fibrosis or wherein the cytopenia is anemia, leukopenia or thrombocytopenia.

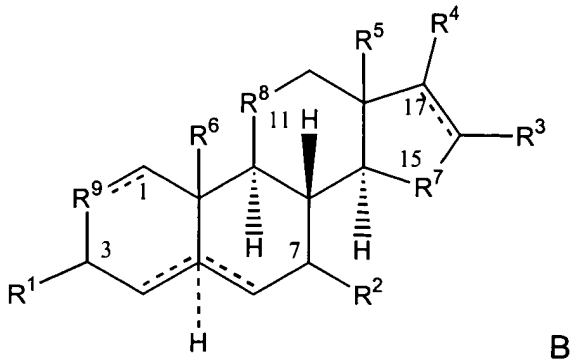
Claim 37 (original): The method of claim 33 wherein the symptom or condition associated with one or more delayed adverse or unwanted effect of the radiation exposure is caused by or associated with radiation damage to one or more of bone marrow cells, bowel epithelium, bone marrow, testicles, ovaries, brain nerves or tissue, peripheral nerves, spinal cord nerves or tissue or skin epithelium.

Claim 38 (original): The method of claim 33 wherein the subject has received or will receive a total radiation dose of at least about 0.5 Gy, at least about 2 Gy, at least about 4 Gy or at least about 6 Gy.

Claim 39 (original): The method of claim 33 wherein the subject has received or is anticipated to receive a total radiation dose of at least about 10 Gy, e.g., about 10, 20, 30, 40, 50, 100, 150, 200 or 300 Gy.

Claim 40 (original): The method of claim 33 wherein about 0.1 mg/kg/day to about 50 mg/kg/day of the formula 1 compound is administered to the subject or delivered to the subject's tissues.

Claim 41 (original): The method of claim 33 wherein the formula 1 compound has the structure B



B

wherein

R^1 is -H, -OH, =O, -SH, =S, $-OCH_3$, $-OC_2H_5$, -O-S(O)(O)-O^-Na^+, -O-S(O)(O)-OC_2H_5, $-CH_3$, $-C_2H_5$, $-OC(O)C(CH_3)_3$, $-OC(O)CH_3$, an optionally substituted monosaccharide, an optionally substituted oligosacccharide comprising two, three or more covalently linked optionally substituted monosaccharides, or an amino acid;

R^2 is -H, -OH, =O, $-CH_3$, $-CF_3$, $-OCH_3$, $-OC_2H_5$, $-C_2H_5$, $-OCH_2CH_2CH_3$, $-OCH_2CH_2CH_2CH_3$, -F, -Cl, -Br or -I;

R^3 is -H, -F, -Cl, -Br, -I, -OH, -SH, =O, $=CH_2$, $-NH_2$, $-CH_3$, $-CF_3$, $-C_2H_5$, -O-C(O)-CH_3, -O-C(O)-CH_2CH_3, -O-C(O)-$CH_2CH_2CH_3$, -C(O)-CH_3, -C(O)-CH_2CH_3, -C(O)-$CH_2CH_2CH_3$;

R^4 is -H, -F, -Cl, -Br, -I, -OH, =O, $=CH_2$, -CCH, -SH -O-C(O)-CH_3, -O-C(O)-CH_2CH_3, -O-C(O)-$CH_2CH_2CH_3$, -C(O)-CH_3, -C(O)-CH_2CH_3, -C(O)-$CH_2CH_2CH_3$, -CHOH-CH_3, -CHOH-CH_2CH_3, -CHOH-$CH_2CH_2CH_3$, -CHOH-C_6H_{13}, an optionally substituted monosaccharide, an optionally substituted oligosacccharide comprising two, three or more covalently linked optionally substituted monosaccharides or an amino acid;

R^5 and R^6 are independently -H, $-CH_3$, $-CH_2OH$, -CHO, $-CH_2F$, $-CH_2Cl$, $-CH_2Br$, $-CH_2I$;

R^7 is $-CH_2$-, -CHF-, -CHCl-, -CHBr-, -CHI-, $-C(CH_2)$- or -CH(C1-8 alkyl, e.g., $-CH(CH_3)$-, $-CH(C_2H_5)$- or $-CH(C_3H_7)$-);

R^8 is $-CH_2$-, -CHF-, -CHCl-, -CHBr-, -CHI-, $-C(CH_2)$-, $-CH(CH_3)$-, $-CH(C_2H_5)$- or $-CH(C_3H_7)$-;

R^9 is $-CH_2-$, -CHOH-, -CHF-, -CHCl-, -CHBr-, -CHI-, $-C(CH_2)-$, $-CH(CH_3)-$, $-CH(C_2H_5)-$, $-CH(C_3H_7)-$, $-CH(OCH_3)-$, $-CH(OC_2H_5)-$ or $-CH(OC_3H_7)-$; and

the hydrogen atom at the 5-position, if present, is in the α- or β-configuration.

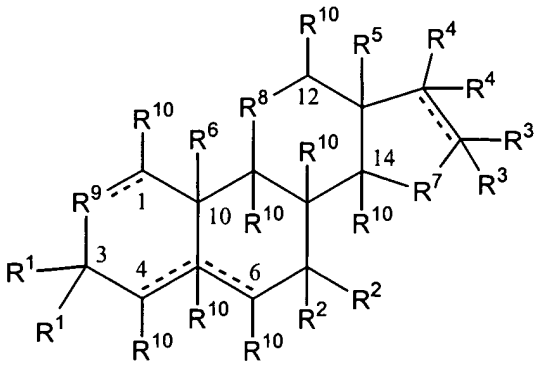
Claim 42 (original): The method of claim 41 wherein R^1, if monovalent, is in the β-configuration.

Claim 43 (original): The method of claim 41 wherein R^1, if monovalent, is in the α-configuration.

Claim 44 (original): The method of claim 41 wherein R^7, R^8 and R^9 independently are $-CH_2-$, -CHF-, -CHCl-, -CHBr-, -CHI-, -CH(C1-8 alkyl)- or -CHOH-.

45 (original): The method claim 41 wherein the formula 1 compound is 16α-bromoepiandrosterone, 16α-bromoepiandrosterone hemihydrate, 16α-hydroxyepiandrosterone, 3α,16α-dihydroxy-5α-androstane-17-one, 3α,16α,17β-trihydroxy-5α-androstane, 3α,16α,17α-trihydroxy-5α-androstane, 3β,17β-dihydroxyandrost-5-ene or 3β,7β,17β-trihydroxyandrost-5-ene, 7-oxodehydroepiandrosterone, 16α-fluoroandrost-5-ene-17-one, 7α-hydroxy-16α-fluoroandrost-5-ene-17-one, 7β-hydroxy-16α-fluoroandrost-5-ene-17-one, 3α-hydroxy-16α-fluoroandrost-5-ene-17-one, 3β-hydroxy-16α-fluoroandrost-5-ene-17-one, 3β,7β-dihydroxy-16α-fluoroandrost-5-ene-17-one, 3β,7α-dihydroxy-16α-fluoroandrost-5-ene-17-one, 3α,7β-dihydroxy-16α-fluoroandrost-5-ene-17-one, 3α,7α-dihydroxy-16α-fluoroandrost-5-ene-17-one, 7β,17β-dihydroxy-16α-fluoroandrost-5-ene, 7α,17β-dihydroxy-16α-fluoroandrost-5-ene, 7β,17α-dihydroxy-16α-fluoroandrost-5-ene, 7α,17α-dihydroxy-16α-fluoroandrost-5-ene, 3β,17β-dihydroxy-16α-fluoroandrost-5-ene, 3α,17β-dihydroxy-16α-fluoroandrost-5-ene, 3β,17α-dihydroxy-16α-fluoroandrost-5-ene, 3α,17α-dihydroxy-16α-fluoroandrost-5-ene, 17α-hydroxy-16α-fluoroandrost-5-ene, 17β-hydroxy-16α-fluoroandrost-5-ene or an ester, ether, sulfate or glucuronide of any of these compounds having a hydroxyl moiety.

Claim 46 (new): The method of claim 1 wherein the compound of formula 1 has the structure



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wherein, each R^1, R^2, R^3, R^5, R^6 and R^{10} independently are -H, OH, -OR^{PR}, -SR^{PR}, -$N(R^{PR})_2$, -O-Si-$(R^{13})_3$, -CHO, -CHS, -CH=NH, -CN, -SCN, -NO_2, -OSO_3H, -OPO_3H, an ester, a thioester, a thionoester, a phosphoester, a phosphothioester, a phosphonoester, a phosphiniester, a sulfite ester, a sulfate ester, an amide, an amino acid, a peptide, an ether, a thioether, an acyl group, a thioacyl group, a carbonate, a carbamate, a halogen, optionally substituted alkyl, optionally substituted alkenyl, optionally substituted alkynyl, optionally substituted aryl, optionally substituted heteroaryl, optionally substituted heterocycle, optionally substituted monosaccharide, optionally substituted oligosaccharide, a nucleoside, a nucleotide, an oligonucleotide, a polymer, or,

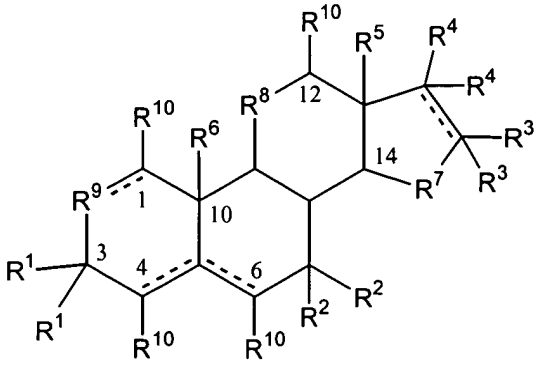
one or more of both R^1, R^2 or R^3 together comprise an independently selected spiro ring, or

one more of R^1, R^2, R^3 and R^{10} are =O, =S, =N-OH, $=CH_2$, or a

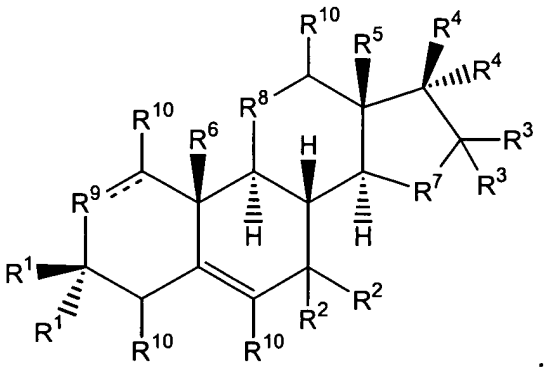
one R^4 is -NH_2, -NHR^{PR}, -$N(R^{PR})_2$, an amide, an amino acid, a peptide, and the other R^4 is -H, optionally substituted alkyl, optionally substituted alkenyl, optionally substituted alkynyl, optionally substituted aryl, optionally substituted heteroaryl or optionally substituted heterocycle, or,

both R^4 together are =NOH or $=NOC(O)CH_3$.

Claim 47 (new): The method of claim 46 wherein the compound of formula 1 has the structure



Claim 48 (new): The method of claim 47 wherein the compound of formula 1 has the structure



Claim 49 (new): The method of claim 48 wherein

R^1 in the β-configuration is -OH, -SH, -Br, -I, an ester, a carbonate, -O-monosaccharide, -O-disaccharide;

R^1 in the α-configuration is -H, optionally substituted alkyl, optionally substituted alkenyl or optionally substituted alkynyl;

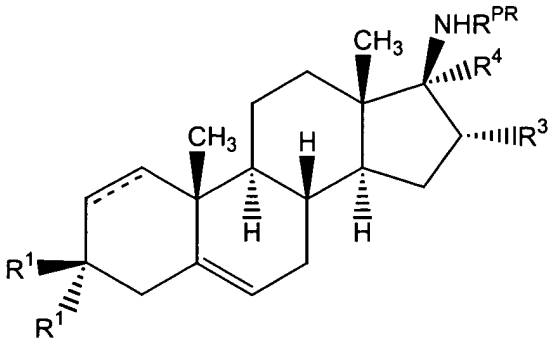
R^4 in the α-configuration is -H, -CN, -SCN, optionally substituted alkyl, optionally substituted alkenyl, optionally substituted alkynyl or an ether;

R^4 in the β-configuration is $-NH_2$, $-NHR^{PR}$ or $-N(R^{PR})_2$;

R^5 is $-CH_3$; and

R^6 is -H or $-CH_3$.

Claim 50 (new): The method of claim 49 wherein the compound has the structure



wherein R^{PR} is -H, an amide or a carbamate.

Claim 51 (new): The method of claim 50 wherein the subject is a mammal.

Claim 52 (new): The method of claim 51 wherein the blood cell deficiency is neutropenia and the mammal has neutropenia, or is subject to developing neutropenia.

Claim 53 (new): The method of claim 52 wherein the compound has the structure